

# clarion Service Manual

Published by Service Administration Section



Model PN-9272U



Model PN-9273U

NISSAN Automobile Genuine  
Radio with Cassette Stereo  
**PN-9272U(CK988)**  
**Model PN-9273U(CK888)**

## ■SPECIFICATIONS:

### [RADIO SECTION]

Circuit system:	Superheterodyne
Tuning system:	Electronic tuning
Receive range:	LW 153kHz to 281kHz MW 531kHz to 1,602kHz UKW 87.5MHz to 108MHz
Intermediate frequency:	LW/MW 459.0kHz UKW 10.7MHz
Quieting sensitivity:	MW Less than 29dB (at 20dB S/N) UKW Less than 10dB (at 30dB S/N) UKW More than 25dB
Separation:	TONE CENTER
Electric Fidelity:	LW/MW 100Hz $-3 \pm 3$ dB 4,000Hz $-14 \pm 3$ dB UKW 70Hz $0 \pm 3$ dB 7,000Hz $-8 \pm 5$ dB
Auto tuning stop sensitivity:	LW DX 30~43dB LO 50~63dB MW DX 23~36dB LO 43~56dB UKW DX 18~31dB LO 38~51dB

### [TAPE SECTION]

Reproduction system:	4 track, 2 channel stereo cassette player
Tape speed:	4.75cm/sec.
Wow & flutter:	Less than 0.1% (W.R.M.S.)
Separation:	More than 40dB
Crosstalk:	More than 48dB
S/N ratio:	60dB
FF, REW time:	Less than 100sec. (C-60)

### [SYNTHESIS]

Load impedance:	$4\Omega \times 4$
Power output:	12W $\times 2$ (1kHz, 1% THD, $4\Omega$ )
	More than 25W $\times 2$ (at max. output)
Power supply voltage:	DC 13.2V (10.8V to 15.6V)
	Negative ground
Current consumption:	Less than 8A (at max. output)
Dimensions:	Width 180mm Height 52mm Depth 164mm
Weight:	1.6kg

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- Noise Reduction System manufactured under license from Dolby Laboratories Licensing Corporation.

## ■COMPONENTS:

Owners guide

280-3518-05

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Antenna jumper

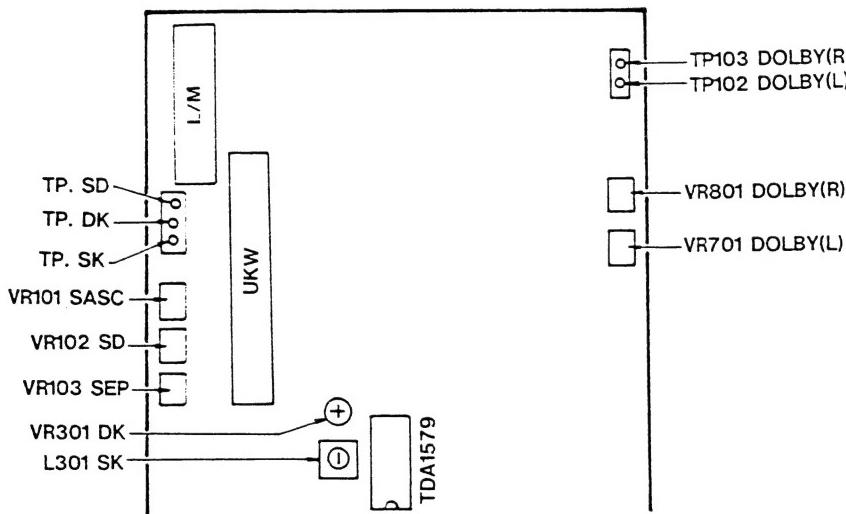
093-0842-01

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## ■ADJUSTMENT:

Adjustment item	Adjustment point	Procedure
SD	VR102	1. Tune at 98.1MHz, input a 25dB SSG signal, 1kHz modulation frequency, 30% modulation degree. 2. Adjust VR102 so that the voltage of TP101 is 5.0V.
SASC	VR101	1. Tune at 98.1MHz, input an 65dB, 7kHz modulation frequency, 30% modulation degree SSG signal. 2. Adjust the output level of the volume controller to OdBm (0.775V). 3. Set the SSG output to 40dB and adjust VR101 so that the output level is -2dB.
Separation	VR103 (NC/MPX BLOCK)	1. Tune at 98.1MHz, connect the output of a stereo modulator to the external modulation terminal, and input a 65dB SSG signal. 2. Set the stereo modulator to the L or R ch and adjust VR103 so that the maximum separation is obtained.
DK use only PN-9272U	VR301	1. Tune at 98.1MHz, input a 55dB non-modulated SSG signal, and on VF SW. 2. Connect the Oscilloscope to TP302 and adjust VR301 so that the Oscilloscope output waveform is maximum.
SK use only PN-9272U	L301	1. Tune at 98.1MHz, input a 55dB non-modulated SSG signal. 2. Connect the Oscilloscope to TP301 and adjust L301 so that the Oscilloscope output waveform is maximum.
Dolby NR	VR701 and VR801	Insert a Dolby level test tape (400Hz-200nWb/m), connect the millivoltmeter to TP102 and TP103, and VR701 and VR801 to obtain an output of 300mV±1dB.

## ●ADJUSTMENT POINT

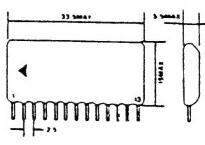


## ■EXPLANATION OF IC's:

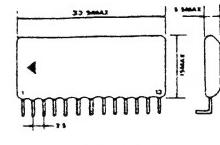
Refer to description in IC service manual vol 2.			
TA7405P	051-0539-00	Dual Preamp	P18
AN6263N	051-0561-01	Music Interval Detection IC	P42
MPX-NC-V	051-0633-00	MPX with Noise Canceller	P10
1WAY-D	051-0738-00	1 Way Diversity System	P6
TA7250BP	051-0748-00	23W BTL Amp	P33
TDA1579	051-0809-00	Traffic Warning (VF) Decoder	P12
TDA1524A	051-0810-00	Tone & Volume Control	P30
TA7251BP	051-0815-00	23W BTL Amp	P33

■NR8810 051-0839-00  
■NR8810-1 051-0839-01 Dolby B type H-IC

Outward Form



NR8810

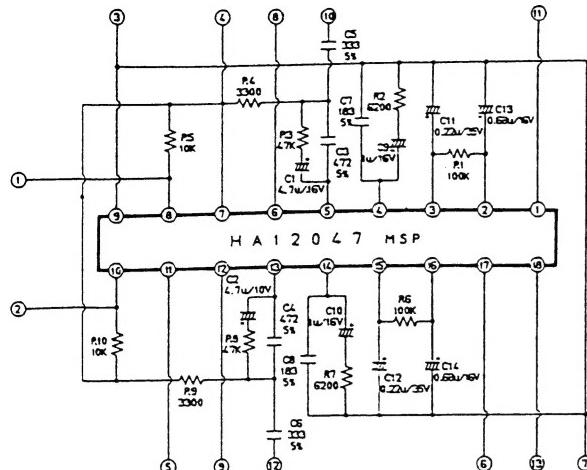


NR8810-1

Maximum Ratings (Ta=25°C)

Item	Symbol	Rating	Unit
Maximum supply voltage	Vcc	18	V
Power dissipation	Pd	200	mV

## Circuit Diagram



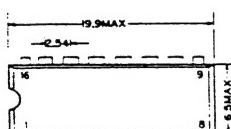
## Electrical Characteristics

( $V_{CC} = 7.5V$ ,  $T_a = 25^\circ C$ ,  $V11(13) = 0dB(NR-OFF)$ )

No	Item	Symbol	Rating			Unit	NR ON (ENC/DEC)	Condition
			Min	Typ	Max			
1	Operating supply voltage	$V_{DD}$	6.0	7.5	12	V	-	
2	Circuit current $I_1(1)$		18	25	mA	ON	No signal	
3	Circuit current $I_1(2)$		23	32	mA	OFF	No signal	
4	Voltage gain $G_{vA}$	20.5	22	23.5	dB	-	$20 \log \frac{V_B(9)}{V_1(2)}$ , $f=400Hz$ , $V_B(9)=0dB$	
5	Signal handling $V_o$ max	14.0	16		dB	ENC	$V11(13)$ , $f=1kHz$ , THD = 1%	
6	S/N ratio (ENC)	S/N ENC	60	65		ENC	$R_g = 2.4k\Omega$ CCIR/ARM Filter	
7	Crosstalk CT11-13		58			OFF	$f=1kHz$ , $V11(13)=0dB$	
8	Channel balance $\Delta G_{vA}$	-1.0	0	1.0	dB	-	$G_1(1 \rightarrow 11) - G_2(2 \rightarrow 13)$	
9	Total harmonic distortion T.H.D(ENC)	-	0.07	0.3	%	ENC	$f=1kHz$ , $V11(13)=0dB$ off	
10	NR ENCODE BOOST 20 log V11(13)enc	ENC 2K	2.8	4.3	5.8	dB	OFF ENC	$f=2kHz$ , $V11(13)=-20dB(NR off)$
	ENC 5K		1.7	3.2	4.7	dB	OFF ENC	$f=5kHz$ , $V11(13)=-20dB(NR off)$
11	NR DECODE CUT 20 log V10(12)dec	DEC 2K	-5.8	-4.3	-2.8	dB	DEC OFF	$f=2kHz$ , $V10(12)=-20dB(DEC)$
	DEC 5K		-4.7	-3.2	-1.7	dB	DEC OFF	$f=5kHz$ , $V10(12)=-20dB(DEC)$

## TC9145P 051-1063-00 Feather Touch Analog Function Switch

### Outward Form



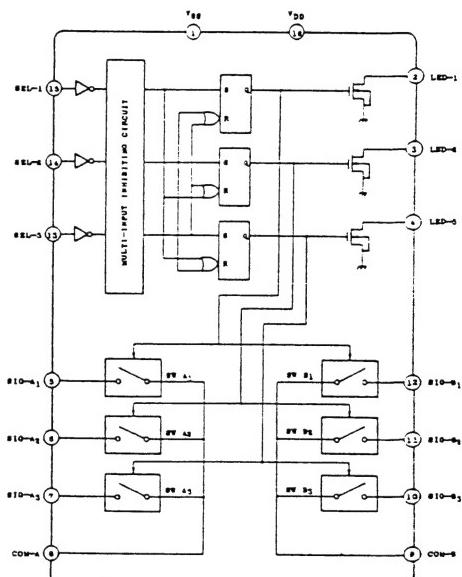
### Pin Connection

$V_{SS}$	1	16	$V_{DD}$
LED <sub>1</sub>	2	15	SEL-1
LED <sub>2</sub>	3	14	SEL-2
LED <sub>3</sub>	4	13	SEL-3
SIG-A <sub>1</sub>	5	12	SIG-B <sub>1</sub>
SIG-A <sub>2</sub>	6	11	SIG-B <sub>2</sub>
SIG-A <sub>3</sub>	7	10	SIG-B <sub>3</sub>
COM-A	8	9	COM-B

## Terminal Description

Pin No.	Symbol	Function	Remarks
15	SEL-1	Select input of each switch. Switches 1 to 3 are turned ON when each of SELs 1 to 3 are set to "H" levels. Built-in flip-flop enables each of SELs 1 to 3 to hold "H" levels by one pulse.	C-MOS INPUT TERMINAL
14	SEL-2		
13	SEL-3		
2	LED-1	Driver output for displaying the state of flip-flop. LED output corresponds to SEL input, and each of LEDs 1 to 3 hold "L" levels when each of SELs 1 to 3 are applied to "H" levels.	OPEN DRAIN TERMINAL
3	LED-2		
4	LED-3		
5/12	SIG-A <sub>1</sub> SIG-B <sub>1</sub>	Signal input 1. When SEL-1 is selected, switch 1 is turned ON to connect this terminal and COM terminal.	
4/11	SIG-A <sub>2</sub> SIG-B <sub>2</sub>	Signal input 2. When SEL-2 is selected, switch 2 is turned ON to connect this terminal and COM terminal.	
7/10	SIG-A <sub>3</sub> SIG-B <sub>3</sub>	Signal input 3. When SEL-3 is selected, switch 3 is turned ON to connect this terminal and COM terminal.	
8/9	COM-A COM-B	Switch common terminal.	
14	$V_{DD}$ $V_{SS}$	Terminal for applying supply voltage. * Two power supplies are available.	

## Block Diagram



# PARTS LIST:

©Electrical section

©RADIO P.W.B

REF.NO.	PART NO.	DESCRIPTION	Q'TY	REF.NO.	PART NO.	DESCRIPTION	Q'TY
D102~105 452.958.959	001-0330-00	Diode 1SS119	7	102.103.104 Q302.304.453 753.852	102-2712-00	Transistor 2SC2712	8
	(001-0294-00)	Diode (1SS133)			(103-0601-00)	Transistor (2SD601AQRS)	
	(001-0352-00)	Diode (1SS176)			102-3326-00	Transistor 2SC3326AB	3
751.752.901 D902.903.951 960	001-0356-00	Diode 1SS184	7	Q107.108.702	(103-1306-00)	Transistor (2SD1306)	3
	(001-0354-00)	Diode (MA151WK)			(103-1328-00)	Transistor (2SD1328)	
D101	001-0361-00	Diode 1SS198TE	1		Q451	102-3327-00	Transistor 2SC3327AB
D957	001-0377-28	Diode MA4051L	1	Q953.955	102-3402-00	Transistor 2SC3402-AC	2
	(001-0376-28)	Diode (MTZ5.1JA)			(125-2003-92)	Transistor	
	(001-0400-29)	Diode (HZS5.1E)			Q958	102-3420-50	Transistor 2SC3420
D955	001-0377-32	Diode MA4056M	1	Q721.821	103-1450-50	Transistor 2SD1450ST-TA	2
	(001-0376-32)	Diode (MTZ5.6J)			(103-1504-05)	Transistor (2SD1504-E)	
	(001-0400-32)	Diode (HZS5.6JB2-TE)			Q951.952.954 Q956	103-1858-50	Transistor 2SD1858
D954.956	001-0377-46	Diode MA4091L	2	Q105.201	108-0161-25	FET 2SK161Y	2
	(001-0376-47)	Diode (MTZ9.1J)		Q452	108-0369-28	FET 2SK369GR	1
	(001-0300-46)	Diode (HZS9.1J)		Q959	125-0001-02	Transistor UN2112	1
D952.953	001-0377-48	Diode MA4091H	2	101.106.109 Q301.303.454 751.754.758	125-2005-02	Transistor UN2212	9
	(001-0376-49)	Diode (MTZ10JA)		R961.966	111-1001-81	Film resistor 1/2W10Ω	2
	(001-0400-48)	Diode (HZS9.1J)		R956	111-1021-81	Film resistor 1/2W1kΩ	1
D451.961	001-0377-49	Diode MA4100L	2	R901.951	111-2291-81	Film resistor 1/2W2.2Ω	2
	(001-0376-50)	Diode (MTZ10J)		R953	111-6811-81	Film resistor 1/2W680Ω	1
TH101	002-0190-00	Thermistor (SD TEMP)	1	R105.115	116-1001-10	Chip resistor 1/8W10Ω	2
L722	010-1712-00	Coil 40μH	1	R108.959	116-1011-10	Chip resistor 1/8W100Ω	2
L202	010-2046-32	Coil 100μH	1	117.202.203 R204.206.456 964	116-1021-10	Chip resistor 1/8W1kΩ	7
L101,102	010-2047-51	Coil LAL03STAR27M 0.27μH	2	127.128.457 R710.712.756 758.810.812 852.904.905	116-1031-10	Chip resistor 1/8W10kΩ	12
L103	010-2047-94	Coil LAL03TA102K 1mH	1	R201.301.303 707.753.807	116-1041-10	Chip resistor 1/8W100kΩ	6
L201	010-2053-00	Coil 140μH	1	R340.759	116-1051-10	Chip resistor 1/8W1MΩ	2
L301	010-2124-00	Coil SK	1	R503.557	116-1231-10	Chip resistor 1/8W12kΩ	2
VR301	012-3808-00	Variable resistor 33kΩ (DK)	1	R110	116-1241-10	Chip resistor 1/8W120kΩ	1
VR101	012-4318-07	Variable resistor 22kΩ (SASC)	1	R109.308.704 804	116-1531-10	Chip resistor 1/8W15kΩ	4
VR102,103	012-4318-08	Variable resistor 33kΩ (SD, SE)	2	R307	116-1831-10	Chip resistor 1/8W18kΩ	1
VR701,801	012-4318-09	Variable resistor 47kΩ (DOLBY)	2	R312.314.906	116-2221-10	Chip resistor 1/8W2.2kΩ	3
IC701	051-0539-00	IC EQ AMP	1	125.126.207 R705.706.708 805.806.808 965	116-2231-10	Chip resistor 1/8W22kΩ	13
IC851	051-0561-01	IC AN6263N APS	1	R106.107.116 205.310.760	116-2241-10	Chip resistor 1/8W220kΩ	6
IC102	051-0633-00	IC MPX-NC-V	1	R113.130.455	116-2721-10	Chip resistor 1/8W2.7kΩ	3
	(051-0633-60)	IC		R102.303	116-2731-10	Chip resistor 1/8W27kΩ	2
IC101	051-0738-00	IC 1WAY-D	1	R119.311	116-3321-10	Chip resistor 1/8W3.3kΩ	2
	(051-0738-50)	IC		R703.803	116-3341-10	Chip resistor 1/8W330kΩ	2
IC301	051-0809-00	IC TDA1579 ARI	1	R114.501.551	116-3931-10	Chip resistor 1/8W39kΩ	3
IC601	051-0810-00	IC TDA1524A E-VOL TON	1	R451	116-4711-10	Chip resistor 1/8W470Ω	1
IC702	051-0839-01	IC NR8810-1 DOLBY	1	R121~124	116-4721-10	Chip resistor 1/8W4.7kΩ	4
IC703	051-1063-00	IC TC9145P	1	R111.853	116-4731-10	Chip resistor 1/8W47kΩ	2
SUP101,102	060-0122-00	Surge protector	2	R313.315	116-5621-10	Chip resistor 1/8W5.6kΩ	2
Q901	100-1020-00	Transistor 2SA10200.Y	1	R118.963	116-6811-10	Chip resistor 1/8W680Ω	2
	(100-0684-50)	Transistor (2SA684RS)		R112	116-6821-10	Chip resistor 1/8W6.8kΩ	1
Q906	100-1162-00	Transistor 2SA1162	1				
	(101-0709-00)	Transistor (2SB709AQRS)					
Q601	100-1175-00	Transistor 2SA1175-TRJHFEK	1				
Q957 701,801,902	102-2458-50	Transistor 2SC2458Y,GR,BL	4				
	(102-3330-50)	Transistor (2SC3330)					

REF.NO.	PART NO.	DESCRIPTION	Q'TY
R129,305,701 801	116-6831-10	Chip resistor 1/8W68kΩ	4
R309,851	116-6841-10	Chip resistor 1/8W680kΩ	2
R103	116-8221-10	Chip resistor 1/8W8.2kΩ	1
C305	043-0214-00	Ceramic capacitor 3300pF PP	1
C702,802	171-1022-06	Ceramic capacitor 1000pF SC	2
C206	171-1032-06	Ceramic capacitor 0.01μF SR SC	1
C851	171-2232-06	Ceramic capacitor 0.022μF SR SC	1
C302	172-4732-20	Polyester capacitor 63V0.047μF SS	1
C110,303,307 308	172-6831-20	Polyester capacitor 63V0.068μF J SS	4
C704,804	173-1031-10	Polyester capacitor 50V0.01μF J S	2
C121,122	173-1531-10	Polyester capacitor 50V0.015μF J S	2
C601,602	173-1532-10	Polyester capacitor 50V0.015μF S	2
C304	173-1831-10	Polyester capacitor 50V0.018μF J S	1
C453	173-2232-10	Polyester capacitor 50V0.022μF S	1
C203,852	173-2731-10	Polyester capacitor 50V0.027μF J S	2
C206	173-3932-10	Polyester capacitor 50V0.039μF S	1
C101,102	175-1007-00	Ceramic chip capacitor 10pF CH TC	2
C301	175-1011-00	Ceramic chip capacitor 100pF CH TC	1
C201	175-2201-00	Ceramic chip capacitor 22pF CH TC	1
C708,808	177-1022-05	Ceramic chip capacitor 1000pF HD	2
C104,105,117 205,901,907	177-1032-05	Ceramic chip capacitor 0.01μF HD	6
C127	177-1522-05	Ceramic chip capacitor 1500pF HD	1
C115	177-2212-05	Ceramic chip capacitor 220pF HD	1
C125,126	177-2222-05	Ceramic chip capacitor 2200pF HD	2

REF.NO.	PART NO.	DESCRIPTION	Q'TY
C118	177-2232-05	Ceramic chip capacitor 0.022μF HD	1
C109	177-4722-05	Ceramic chip capacitor 4700pF HD	1
C114	177-5612-05	Ceramic chip capacitor 560pF HD	1
C113	177-6822-05	Ceramic chip capacitor 6800pF HD	1
C969	179-2273-23	Electrolytic capacitor 10V220μF S	1
C452	181-1053-62	Electrolytic capacitor 50V1μF LL	1
C106	181-3343-62	Electrolytic capacitor 50V0.33μF LL	1
C309,312	183-1043-62	Electrolytic capacitor 50V0.1μF USS	2
C103,111,204 C701,706,709 C710,801,806 809,810	183-1053-62	Electrolytic capacitor 50V1μF USS	11
C122,313,314 C315,751,752 757	183-1063-32	Electrolytic capacitor 16V10μF USS	7
C123,124,311	183-1543-62	Electrolytic capacitor 50V0.15μF USS	3
C310	183-2243-62	Electrolytic capacitor 50V0.22μF USS	1
C501,551,705 707,805,807	183-2253-62	Electrolytic capacitor 50V2.2μF USS	6
C702,703,756 853	183-2263-32	Electrolytic capacitor 16V22μF USS	4
C445	183-3343-62	Electrolytic capacitor 50V0.33μF USS	1
C107,108,116	183-3363-22	Electrolytic capacitor 10V33μF USS	3
C202	183-4743-62	Electrolytic capacitor 50V0.47μF USS	1
C128,306	183-4753-52	Electrolytic capacitor 35V4.7μF USS	2
C451,735,754 C755 C951~958 968	183-4763-32	Electrolytic capacitor 16V47μF USS	13
C207	183-6863-22	Electrolytic capacitor 10V68μF USS	1

### ◎POWER P.W.B

REF.NO.	PART NO.	DESCRIPTION	Q'TY
D721	001-0334-00 (001-0334-50)	Diode DSR17B Diode	1
D722~724	001-0466-00	Diode S5688B	3
L721	009-0633-03	Choke coil	1
LY721	014-0509-00	Relay G6B-1114P	1
IC721	051-0748-00	IC TA7250BP POWER	1
IC821	051-0815-00	IC TA7251BP POWER	1
Q721,821	103-1450-50	Transistor 2SD1450ST-TA	2
C722,822	171-1022-06	Ceramic capacitor 1000pF SC	2

REF.NO.	PART NO.	DESCRIPTION	Q'TY
C733	172-3342-20	Polyester capacitor 63V0.33μF SS	1
C760~763	173-1022-10	Polyester capacitor 1000pF S	4
C704,804	173-1031-10	Polyester capacitor 50V0.01μF J S	2
C728~730 828~830	173-2242-10	Polyester capacitor 50V0.22μF S	6
C723,734,823	173-3332-10	Polyester capacitor 50V0.033μF S	3
C731	042-0348-00	Electrolytic capacitor 16V2200μF	1
C721,821	179-1053-62	Electrolytic capacitor 50V1μF S	2
C724~727 824~827	179-1073-22	Electrolytic capacitor 10V100μF S	8
C732	179-1073-42	Electrolytic capacitor 25V100μF S	1

### ◎TONE P.W.B

REF.NO.	PART NO.	DESCRIPTION	Q'TY
IC601	051-0810-00	IC TDA1524A E-VOL TON	1
Q601	100-1175-00	Transistor 2SA1175-TRJHFEK	1
C603,604	173-4732-10	Polyester capacitor 50V0.047μF S	2

REF.NO.	PART NO.	DESCRIPTION	Q'TY
C712,812	182-2253-62	Electrolytic capacitor 50V2.2μF SS	2
C605~607	183-1043-62	Electrolytic capacitor 50V0.1μF USS	3

### ◎VR P.W.B

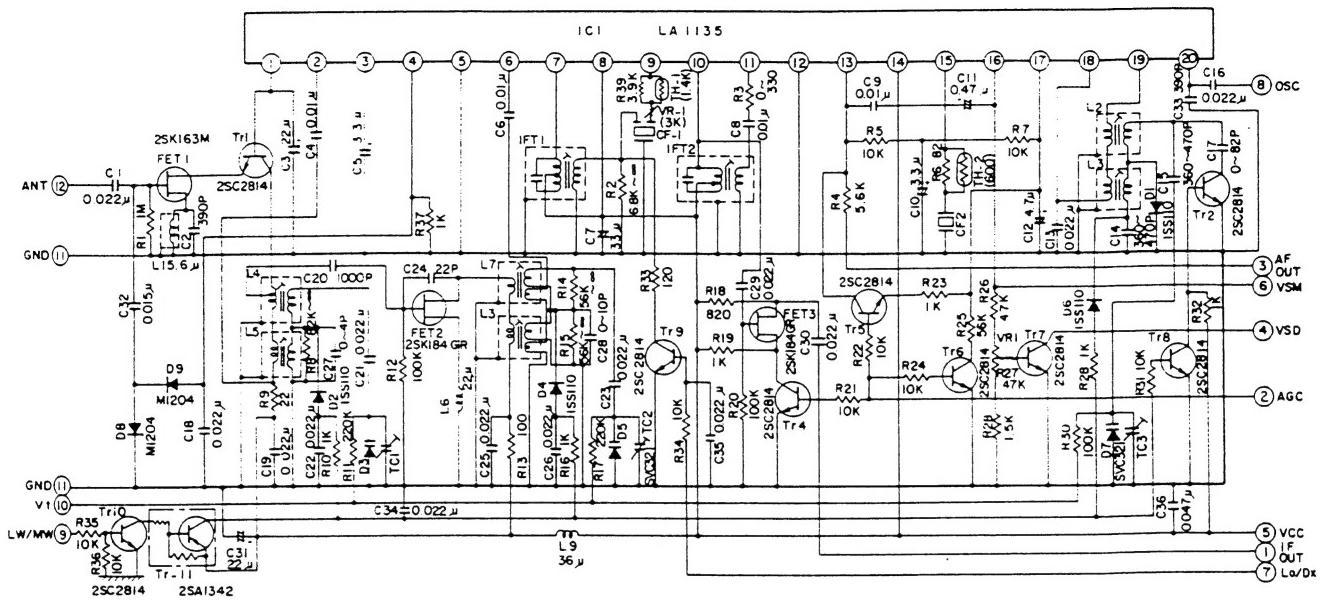
REF.NO.	PART NO.	DESCRIPTION	Q'TY
C609,610	183-1043-62	Electrolytic capacitor 50V0.1μF USS	2

REF.NO.	PART NO.	DESCRIPTION	Q'TY
C608	183-4763-32	Electrolytic capacitor 16V47μF USS	1

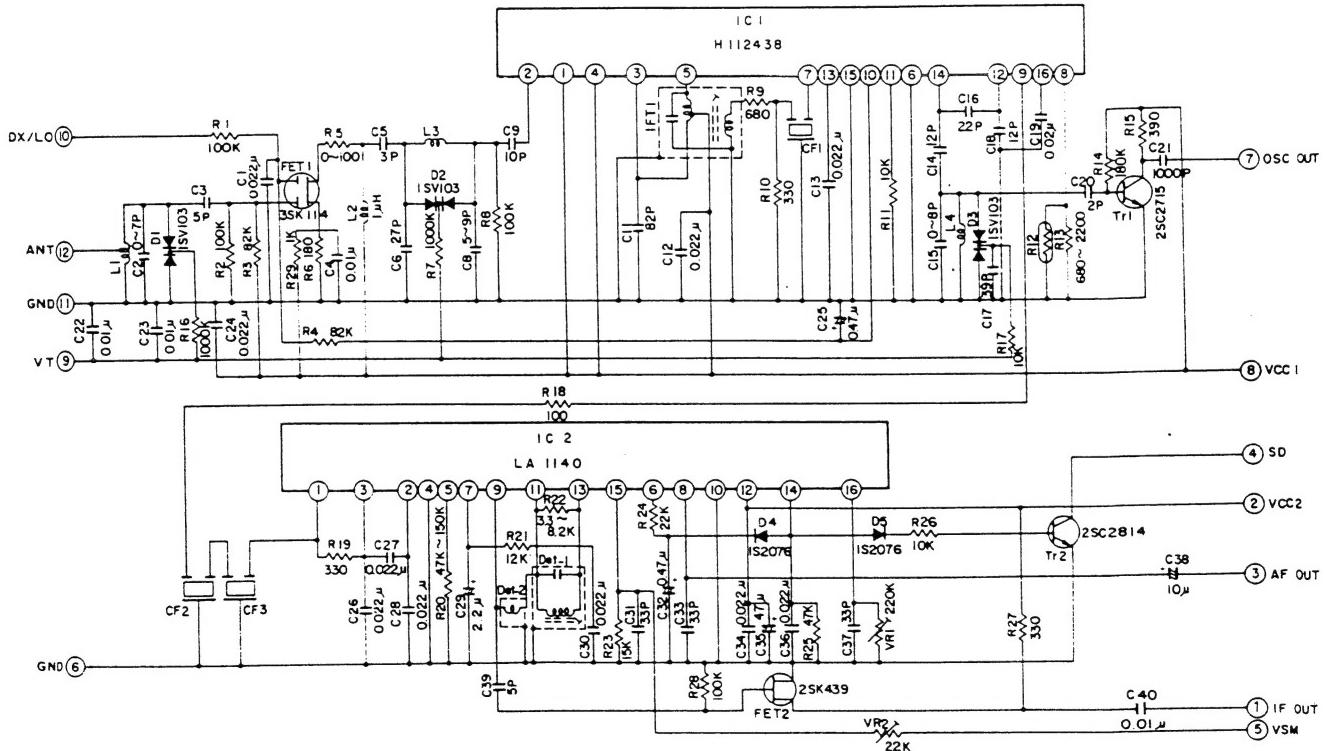
NOTE : OM (Oxidized Metal) SS (Super Small)  
S (Small) TC (Temperature-Compensating)  
HD (Higher Dielectric) LL (Low Leak)  
SC (Semi-Conductor) USS (Ultra Super Small)

## ■BLOCK CIRCUIT DIAGRAM:

◎MW/LW TUNER PACK 941-0157-51

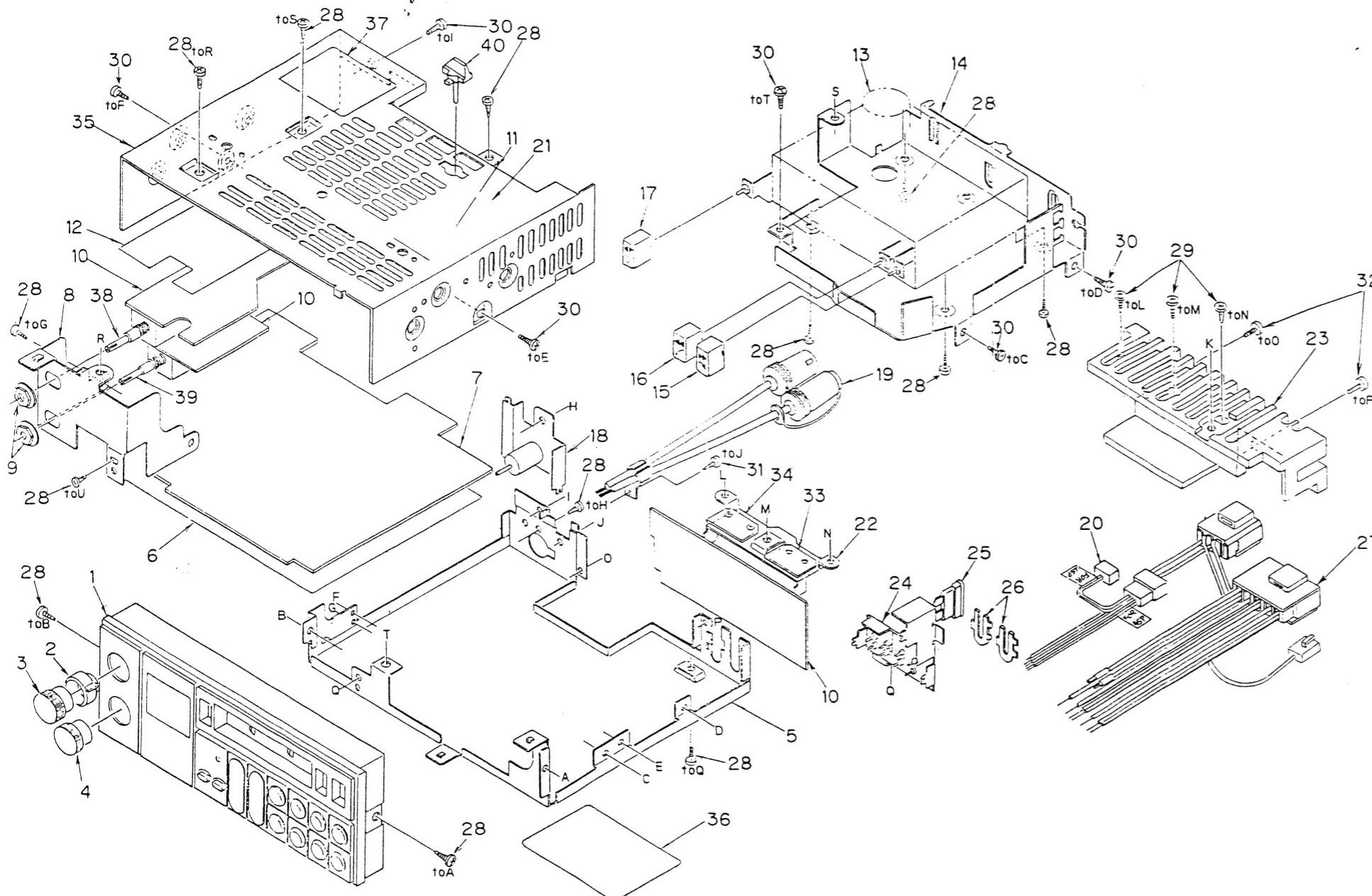


◎UKW TUNER PACK 941-0156-51



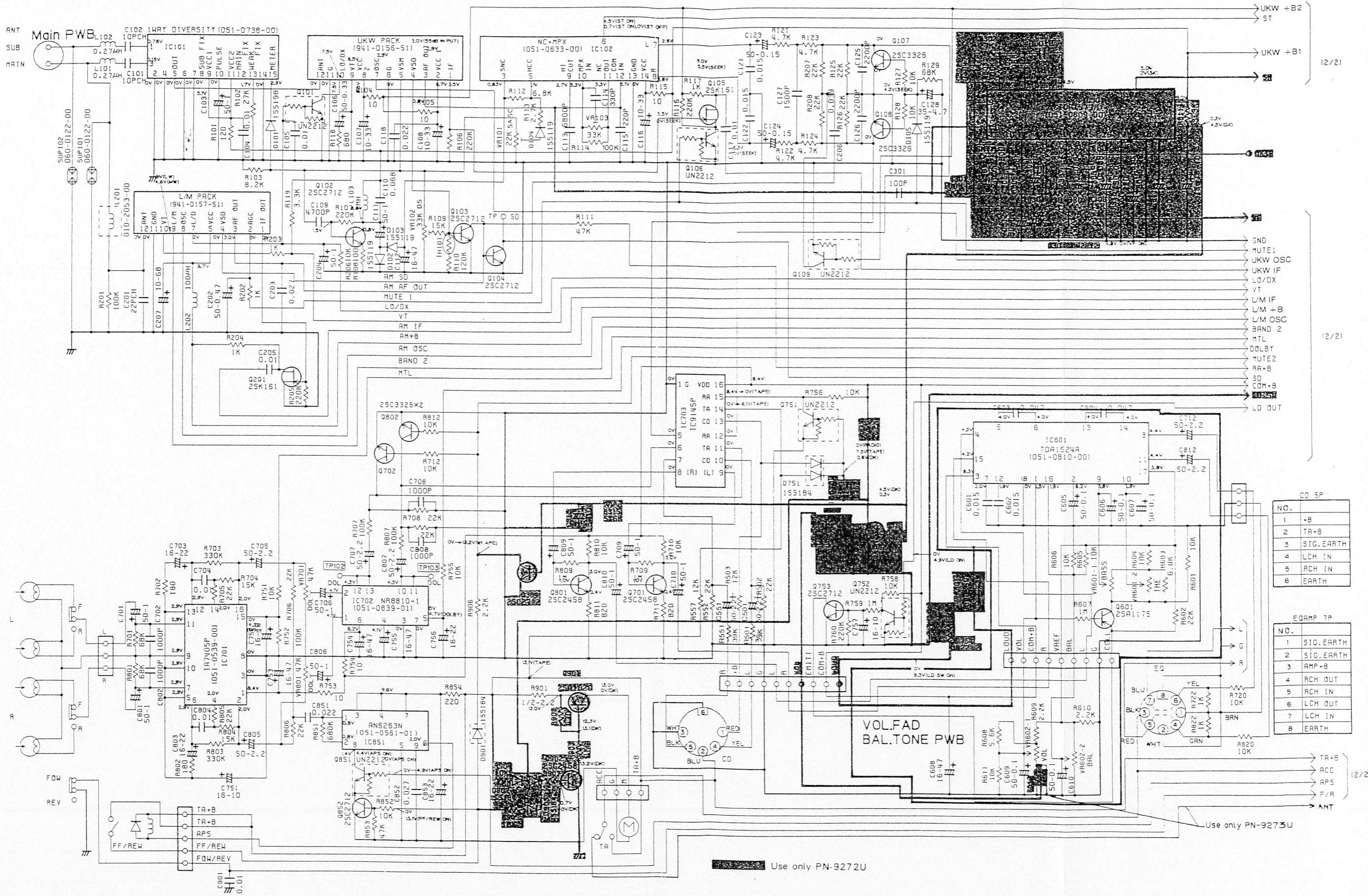
## ■ EXPLODED VIEW • PARTS LIST:

◎Main section

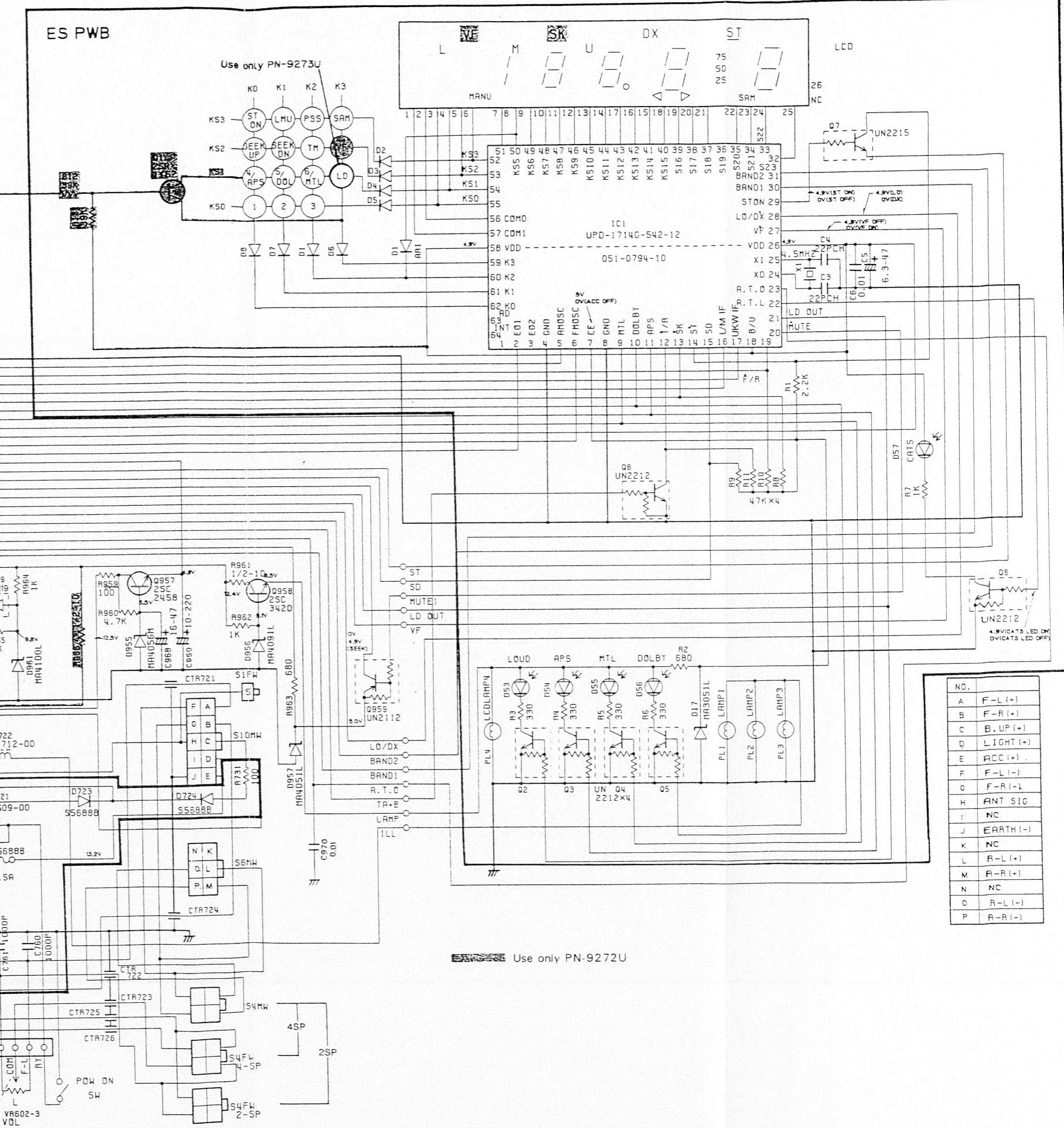
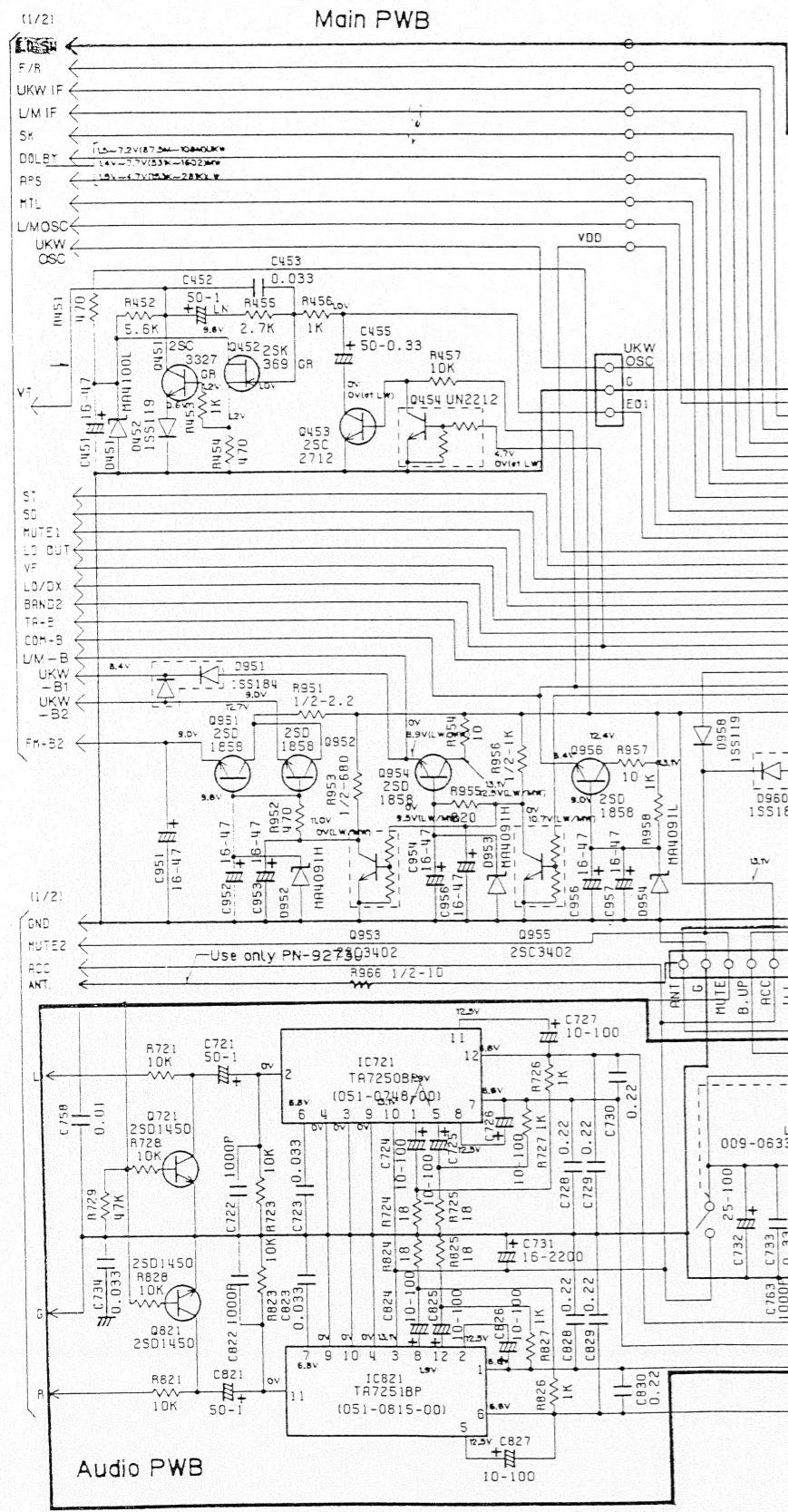


REF.NO.	PART NO.	DESCRIPTION	Q'TY
1	940-2992-05	Escutcheon ass'y (PN-9272U)	1
	940-2992-00	Escutcheon ass'y (PN-9273U)	
2	380-4754-00	Knob (FADER)	1
3	380-4991-00	Knob (VOL)	1
4	380-4992-00	Knob (TON, BAL)	1
5	311-1236-10	Lower case	1
6	347-2053-01	Insulator	1
7	099-8370-00	P.W.	1
8	330-8422-03	VR holder	1
9	722-0231-00	Nut	2
10	099-8371-01	P.W.B	1
11	285-1259-00	Guide label	1
12	347-2052-01	Insulator	1
13	930-0558-13	Tape mechanism	1
14	330-8417-04	Mechanism bracket	1
15	382-1622-00	Button (REW)	1
16	382-1623-00	Button (FF)	1
17	382-1624-00	Button (PRO)	1
18	330-8319-00	Antenna receptacle	1
19	854-0587-00	Extension lead(DIN 5P/7P)	1
20	852-9330-00	Extension lead	1
21	285-1000-04	Guide label	1
22	330-8903-00	IC support	1
23	313-1343-00	Heat sink	1
24	944-0750-00	Filter ass'y	1
25	060-0057-05	Auto fuse	1
26	335-1164-00	Lead holder	2
27	852-9329-02	Extension lead	1
28	714-3005-81	Machine screw (M3x5)	13
29	714-3006-81	Machine screw (M3x6)	3
30	731-3006-80	Tap tight (M3x6)	6
31	731-3008-80	Tap tight (M3x8)	1
32	714-3010-81	Machine screw (M3x10)	2
33	051-0815-00	IC (R)	1
34	051-0748-00	IC (L)	1
35	310-1273-03	Upper case	1
36	286-7046-02	Set plate	1
37	286-6936-07	Set plate (PN-9272U)	1
	286-7042-01	Set plate (PN-9273U)	
38	012-4755-00	Variable resistor	1
39	012-4757-00	Variable resistor (PN-9272U)	1
	012-4756-00	Variable resistor (PN-9273U)	
40	335-1360-00	Lock pin	1

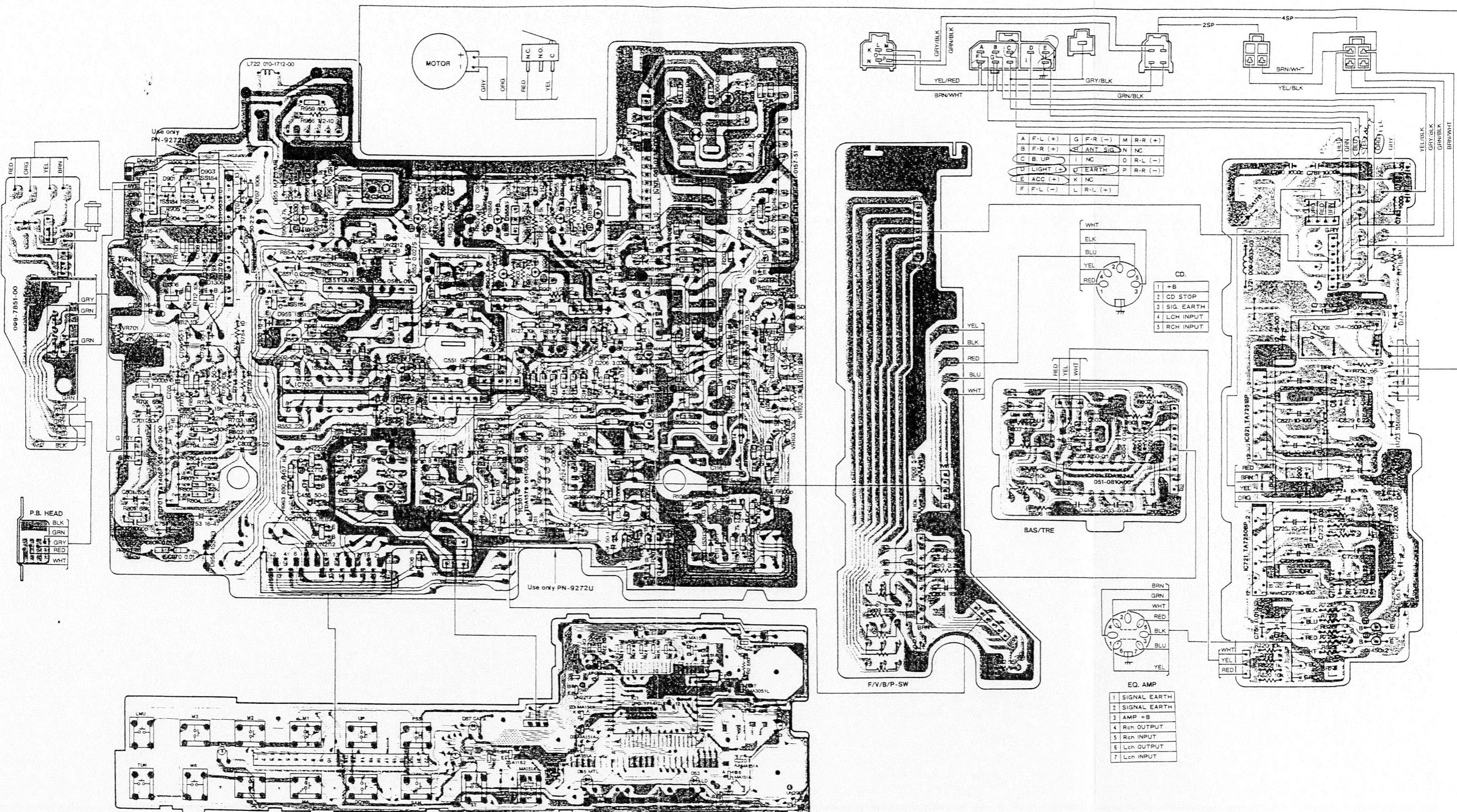
**CIRCUIT DIAGRAM: 1/2**



**CIRCUIT DIAGRAM: 2/2**

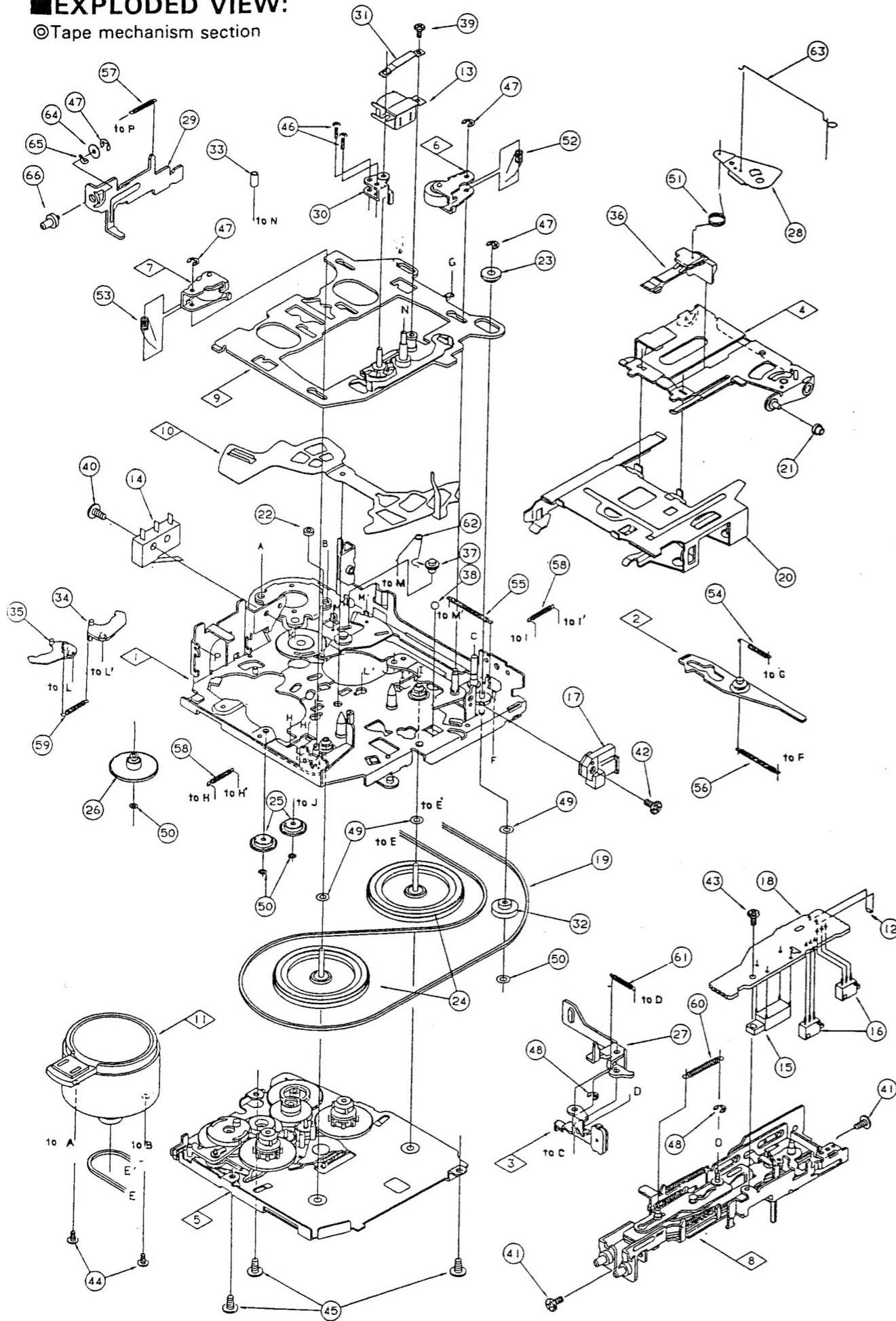


■ PRINTED WIRING BOARD:



## ■ EXPLODED VIEW:

② Tape mechanism section



## ■ PARTS LIST:

② Tape mechanism section

REF.NO.	PART NO.	DESCRIPTION	Q'TY	REF.NO.	PART NO.	DESCRIPTION	Q'TY
1	960-3834-02	Deck-P-ass'y R	1	34	631-0550-02	Brake F	1
2	960-3837-04	Shift-P-ass'y	1	35	631-0551-02	Brake R	1
3	960-3839-03	Plunger-L-ass'y	1	36	631-0552-03	Pack stopper	1
4	960-3840-02	Guide arm ass'y	1	37	632-1886-02	Lock pin	1
5	960-3851-08	Bottom sub-A-RM	1	38	632-1888-00	Ball	1
6	960-3852-02	Roller ass'y-F	1	39	716-0816-00	Screw	1
7	960-3853-02	Roller ass'y-R	1	40	714-2308-81	Machine screw (M2.3x8)	1
8	960-3977-01	Frame-S-A-RMSF	1	41	714-2604-81	Machine screw (M2.6x4)	2
9	960-3867-04	Head-P-ass'y RMD	1	42	714-2606-11	Machine screw (M2.6x6)	1
10	960-3881-03	CH plate ass'y	1	43	716-0485-00	Machine screw (M	1
11	SMA-112-101	Motor ass'y	1	44	716-0715-15	Screw	2
12	001-0330-00	Diode	1	45	716-0717-10	Screw	3
13	011-0298-10	Head	1	46	716-0718-20	Screw	2
14	013-2690-02	Switch	1	47	743-1500-20	E-ring	4
15	013-3807-00	Switch	1	48	743-2000-20	E-ring	2
16	013-3808-01	Switch	2	49	746-0624-00	Washer	3
17	015-0232-01	Plunger	1	50	746-0761-00	Washer	4
18	099-7851-00	P.W.B	1	51	750-2361-01	Spring	1
19	602-0103-10	Belt	1	52	750-2535-03	Roller spring F	1
20	606-0083-06	Pack guide	1	53	750-2536-03	Roller spring R	1
21	610-0226-00	Roller	1	54	750-2537-02	Over-P-spring	1
22	610-0293-01	Power roller	1	55	750-2538-01	Power-P-spring	1
23	610-0294-01	Head-P-G-roller	1	56	750-2539-01	Shift-P-spring	1
24	611-0077-01	Flywheel	2	57	750-2541-01	Program spring	1
25	613-0095-01	FF idler gear	2	58	750-2545-00	FF gear spring	2
26	613-0087-01	Gear A	1	59	750-2547-00	Brake spring	1
27	630-1930-01	Off arm	1	60	750-2554-03	Click-P-spring	1
28	630-1932-02	Swing arm	1	61	750-2555-02	Off arm spring	1
29	630-2289-00	Program lever F	1	62	750-2568-00	Lock spring	1
30	630-1956-02	Adjust link	1	63	750-2569-03	Eject rod RS	1
31	630-1962-02	Head spring	1	64	745-0713-00	Washer	1
32	604-0035-00	Tention pulley	1	65	745-0711-00	Washer	1
33	631-0545-01	Eject roller	1	66	632-1955-01	Forting pin	1